

Package: FormShare (via r-universe)

August 20, 2024

Type Package

Title A Simple Connection Between the 'FormShare App' and 'R' for
Advanced Analytics

Version 1.0.1

Description Provides analytics directly from 'R'. It requires:
'FormShare App': <<https://github.com/qlands/FormShare> >=
2.22.0> . Analytics plugin:
<https://github.com/qlands/formshare_analytics_plugin> . Remote
SQL plugin: <https://github.com/qlands/formshare_sql_plugin> .

URL <https://github.com/qlands/formshare-R-package>

BugReports <https://github.com/qlands/formshare-R-package/issues>

Depends R (>= 3.0)

Imports R6, httr, jsonlite

License GPL-3

Encoding UTF-8

LazyData true

RoxygenNote 7.2.2

Roxygen list(markdown = TRUE)

StagedInstall yes

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

Repository <https://qlands.r-universe.dev>

RemoteUrl <https://github.com/qlands/formshare-r-package>

RemoteRef HEAD

RemoteSha a0b7b85977a9d7b6089910b0e4d992ba55ae8afb

Contents

FormShare	2
Index	6

FormShare

An R6 Class Representing a connection to FormShare

Description

The main FormShare class.

Details

This class encapsulates all functions to execute analytics in FormShare.

Public fields

`user_id` The user ID in FormShare.
`api_key` The API key used to connect to FormShare.
`api_secret` The API secret used to connect to FormShare
`server_url` The FormShare server to connect to
`logged_in` Whether the used has a valid connection
`api_token` Token to use in other functions
`token_url` FormShare URL to retrieve a valid token

Methods**Public methods:**

- `FormShare$new()`
- `FormShare$get_api_key()`
- `FormShare$set_api_key()`
- `FormShare$get_api_secret()`
- `FormShare$set_api_secret()`
- `FormShare$get_server_url()`
- `FormShare$set_server_url()`
- `FormShare$login()`
- `FormShare$get_repositories()`
- `FormShare$get_tables()`
- `FormShare$get_fields()`
- `FormShare$execute()`
- `FormShare$get_table()`
- `FormShare$clone()`

Method `new()`: Create a new FormShare object.

Usage:

```
FormShare$new(  
  server_url = "https://formshare.org",  
  user_id = "",  
  api_key = "",  
  api_secret = ""  
)
```

Arguments:

`server_url` Server URL. By default `https://formshare.org`

`user_id` The user ID to use

`api_key` The API Key to use.

`api_secret` The API Secret to use.

Returns: A new FormShare object.

Method `get_api_key()`: Get the current API key.

Usage:

```
FormShare$get_api_key()
```

Method `set_api_key()`: Sets the current API key.

Usage:

```
FormShare$set_api_key(new_key)
```

Arguments:

`new_key` New API key

Method `get_api_secret()`: Get the current API secret

Usage:

```
FormShare$get_api_secret()
```

Method `set_api_secret()`: Sets the current API secret.

Usage:

```
FormShare$set_api_secret(new_secret)
```

Arguments:

`new_secret` New API secret

Method `get_server_url()`: Get the current server URL

Usage:

```
FormShare$get_server_url()
```

Method `set_server_url()`: Sets the current server URL.

Usage:

```
FormShare$set_server_url(new_url)
```

Arguments:

`new_url` New server URL

Method `login()`: Log-in to the FormShare server and stores a API token

Usage:

```
FormShare$login()
```

Returns: True or False if the connection was successful.

Method `get_repositories()`: Return the repositories that the user has access to.

Usage:

```
FormShare$get_repositories()
```

Returns: A data frame with repositories that the user has access to.

Method `get_tables()`: Get the tables in a repository.

Usage:

```
FormShare$get_tables(repository)
```

Arguments:

`repository` The repository to use

Returns: A data frame with tables inside a repository.

Method `get_fields()`: Get the fields in a table of a repository.

Usage:

```
FormShare$get_fields(repository, table)
```

Arguments:

`repository` The repository to use

`table` The table to use

Returns: A data frame with fields inside a table.

Method `execute()`: Executes an SQL and returns its result.

Usage:

```
FormShare$execute(repository, sql)
```

Arguments:

`repository` The repository to use

`sql` SQL to execute

Returns: A data frame with the result of the execution.

Method `get_table()`: A convenient function to return the contents of a table.

Usage:

```
FormShare$get_table(repository, table)
```

Arguments:

`repository` The repository to use

`table` Table to retrieve

Returns: A data frame with data of the table

Method `clone()`: The objects of this class are cloneable with this method.

Usage:

```
FormShare$clone(deep = FALSE)
```

Arguments:

`deep` Whether to make a deep clone.

Examples

```
# This class requires an API key and secret
# you can get one at https://formshare.org/
#
# Create a new connection to FormShare
my_connection = FormShare$new(server_url = "https://formshare.org",
user_id = "my_user",api_key = "my_api_key",api_secret = "my_api_secret")

# Log in with your account credentials
my_connection$login()

# Get the repositories that your account has access to
repositories = my_connection$get_repositories()

# Get the tables in a repository
tables = my_connection$get_tables("a_repository")

# Get the fields in a table
fields = my_connection$get_fields("a_repository", "a_table")

# Execute a SQL
data = my_connection$execute("a_repository", "SELECT * FROM maintable")

# Get the data from a table
data = my_connection$get_table("a_repository", "a_table")
```

Index

FormShare, [2](#)